



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,168	06/29/2005	Christopher A Brumm	17303-62826	4386
35973 7590 03/29/2009 BINGHAM MCHALE LLP 2700 MARKET TOWER 10 WEST MARKET STREET INDIANAPOLIS, IN 46204-4900				
EXAMINER PRAKASAM, RAMYA G				
ART UNIT 3651		PAPER NUMBER		
NOTIFICATION DATE 03/20/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

schantz@binghammchale.com  
pbailey@binghammchale.com  
djones@binghammchale.com

### Office Action Summary

**Application No.**

10/541,168

**Applicant(s)**

BRUMM, CHRISTOPHER A

**Examiner**

RAMYA PRAKASAM

**Art Unit**

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.  
4a) Of the above claim(s) 1-7 and 28-39 is/are withdrawn from consideration.  
5) ☒ Claim(s) 23-27 is/are allowed.  
6) ☒ Claim(s) 8-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

***Claim Rejections - 35 USC § 102***

2. Claims 8-9, 13-17, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hodlewsky (U.S. Patent No. 5,330,045).

Hodlewsky discloses an apparatus for conveying a product, comprising:

- A plurality of roller shafts (see Figure 1);
- A plurality of driven rollers supported by each roller shaft (48 – See Figures 1 and 3);
- Each said roller having an outer surface and a plurality of lobes placed circumferentially around the outer surface (See Figures – rounded projections) and a static member having a top surface and a length extending from between a first pair of said rollers of a first said shaft to between a second pair of said rollers of a second said shaft;
- Wherein said lobes support the product at a first vertical height (See Figures), and the top surface of the static member is adapted and configured to support a portion of the product between a pair of said rollers at a second vertical height different (between the rollers on the plurality of roller shafts) than the first vertical height.
- Wherein said rollers are slippable rollers slippably driven by the outer diameter of the corresponding said shaft (see Column 6, lines 3-21).

- Wherein said static member is supported by a plurality of said roller shafts (see Figure 3).
- Wherein said static member includes a plurality of slots, said corresponding shafts supporting said static member at said slots (see Figure 3 – between each roller is a corresponding slot).
- Means for interlocking adjacent driven rollers, such that the lobes of one adjacent roller have a predetermined angular relationship to the lobes of the other adjacent roller (See Figure 3).
- Wherein said interlocking means establishes a single predetermined angular relationship between all the lobes of one adjacent roller to all the lobes of the other adjacent roller (See Figure 3)
- Wherein said first pair of rollers are not interlocked together and the second pair of rollers are not interlocked together (see Figure 3 – groups are interlocked together).

Hodlewsky further discloses an apparatus for conveying a product, comprising:

- A roller shaft having a smooth outer diameter (See Figures 20 – 21);
- A plurality of rollers rotatably supported by said roller shaft (See Figures),
- Each said roller having an outer surface and a plurality of lobes placed circumferentially around the outer surface, each said roller having an inner diameter adapted and configured for being slippably driven by said shaft (See Figures and Column 6, lines 3-21).

- Means for coupling together said plurality of rollers such that said rollers rotate in unison (See Figures 1 and 3).

Hodlewsky also discloses an apparatus for conveying a product comprising:

- A roller shaft having an outer diameter (See Figures 20 and 21);
- A plurality of rollers supported by the outer diameter of said roller shaft (See Figures 20 and 21);
- Each said roller having an outer surface and a plurality of equally-spaced lobes placed circumferentially around the outer surface (See Figures 1 and 3),
- Wherein at least one side of each roller includes a plurality of equally-spaced interlockable members, and the number of interlockable members is equal to the number of lobes (See Figure 3).
- Wherein said shaft includes at least two adjacent rollers which are in fixed relationship to each other by interlocking of the interlockable members of one of said adjacent roller to the interlockable members of the other said adjacent roller (See Figure 3).

***Claim Rejections - 35 USC § 103***

3. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodlewsky in view of Plesh (US Patent Application Publication No. 2003/0146065).

Hodlewsky discloses all claimed limitations, except for explicitly disclosing a difference in vertical distance between the two vertical heights of more than one of a millimeter and less than one and one-half millimeters. Plesh discloses a difference in

vertical distance between the two vertical heights of more than one of a millimeter and less than one and one-half millimeters (See Paragraph 40) for the purpose of maintaining a position of conveyed items (See Paragraph 40). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Hodlewsky by utilizing a difference in vertical distance between the two vertical heights of more than one of a millimeter and less than one and one-half millimeters for the purpose of maintaining a position of conveyed items.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hodlewsky in view of Faulkner (US Patent No. 4,270,899).

Hodlewsky discloses all claimed limitations, except for explicitly disclosing that the static member have a width greater than about one half of a millimeter and less than about two millimeters. Faulkner discloses the use of a static member (38) with a width less than about 2 millimeters for the purpose of providing supporting the rollers (See Figures 4 and 5). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Hodlewsky by utilizing a static member with a width less than about 2 millimeters for the purpose of providing supporting the rollers.

5. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodlewsky in view of Meishner (U.S. Patent No. 6,148,991).

Hodlewsky discloses all claimed limitations, except for a conveying apparatus wherein the product is a stack of paper products. Meishner discloses the use of a conveying apparatus with roller-shaft engagement that conveys stacks of paper products (See Abstract) for the purpose of allowing the rollers to contact the undersides

of the lowermost sheets of the stacks such that sheets will not be shifted in transport (See Abstract and Column 2, lines 35-45). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Hodlewsky by conveying stacks of paper products for the purpose allowing the rollers to contact the undersides of the lowermost sheets of the stacks such that sheets will not be shifted in transport.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hodlewsky in view of Clopton (U.S. Patent No. 6,062,378).

Hodlewsky discloses all claimed limitations, except for a spring. Clopton discloses a spring (16 – See Figure 5) for the purpose of creating a force that will push the rollers toward each other (See Column 2, lines 50-54). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Hodlewsky by utilizing a spring for the purpose of creating a force that will push the rollers toward each other.

***Allowable Subject Matter***

7. Claims 23-27 are allowed.

8. The following is an examiner's statement of reasons for allowance: Claim 23 recites an apparatus comprising a roller shaft having an outer diameter, a plurality of rollers supported by the outer diameter, each roller having an outer surface and a plurality of equally spaced lobes, wherein adjacent rollers are in a fixed relationship to each other with a predetermined offset of more than 14 degrees and less than 56

degrees. These limitations, in combination with the other limitations in the claims, were not found in the relevant prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

9. Applicant's arguments with respect to Claims 23-27 have been fully considered and are persuasive.
10. Applicant's arguments filed on 4/30/2008 with regards to Claims 8-22 have been fully considered but they are not persuasive.

With regards to applicant's argument that Hodlewsky does not include the rollers as claimed in 8 and 20 because they are cylindrical, nowhere in applicant's claims do the rollers preclude rollers that are cylindrical. The rollers, as claimed, have an outer surface and a plurality of lobes, as Hodlewsky's rollers do.

With regards to applicant's argument that Hodlewsky does not contain a plurality of lobes placed circumferentially around the outer surface, examiner draws applicant's attention to the Figures, particularly Figure 4. The rounded projections atop the roller constitute a plurality of lobes placed around the outer surface of the rollers. A 'lobe' can be defined as a "rounded projection". WEBSTER'S II DICTIONARY 418 (3<sup>rd</sup> ed. 2005). Further, Figure 4 shows that the rollers contain a smaller hub, and further an outside



portion (lobes) on the outside diameter of the rollers. Therefore, the outer rounded projections can be considered lobes.

With regards to applicant's argument that Hodlewsky fails to disclose a static member with a top surface adapted and configured to support a portion of the product, and further that Hodlewsky teaches away from a static member as claimed, simply because the link does not get "caught on" the intermediate support does not necessary preclude the intermediate support from being adapted and configured to support a portion of the product. In fact, Column 3, lines 59-68 and Column 4, lines 1-14 provide that the static member provides support the weight of the product, and are adapted to allow rollers to pass through the static member. Therefore, this limitation is disclosed.

With regards to applicant's argument that Hodlewsky fails to disclose a means for interlocking adjacent driven rollers, the rollers are coupled together by chains 52, therefore there is in fact a means to interlock adjacent rollers such that they rotate in unison (See Column 5, lines 33-47). 'Interlocking' can be defined as "joining closely". WEBSTER'S II DICTIONARY 377 (3<sup>rd</sup> ed. 2005). Simply because rollers do not fit tightly against each other does not mean that there is not interlocking or the close joining of the adjacent rollers, therefore Hodlewsky does not teach away from this limitation.

For the foregoing reasons, Claims 8-22 stand rejected.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMYA PRAKASAM whose telephone number is (571)272-6011. The examiner can normally be reached on Monday - Thursday, 9am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571)272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/  
Supervisory Patent Examiner, Art  
Unit 3651

3/16/2009  
RGP